# Work Order ID 72130 Tuesday, July 19, 2011 12:42:05 PM

QC

Quality Control

Page 1

D3414-041 Item ID: Accept Setup Start **Revision ID:** Stop Lug Assembly Item Name: 7/19/2011 **Start Qty:** 10.00 Start Date: **Cust Item ID:** Required Date: 7/25/2011 Req'd Qty: 10.00 **Customer:** Reference: Start Run 79Tooling: **Process Plan:** Approvals: Date Date: Stop Date: QC: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Reject Reject Accept Insp. Work Center ID Description **Run Hours** Code Qty Qty Number Stamp **Draw Nbr Revision Nbr** D3414 Rev C 100 0.00 B11-8-4 0.00 Waterjet Memo FLOW CNC Waterjet 1-Cut as per Dwg D3414-1 Dwg Rev: 304.100 Prog Rev: 2-Deburr if necessary 110 QC2- Inspect parts off machine FAI/FAIB 0.00 B11-8-4

0.00

Memo

Dart Aerospace L	_td
------------------	-----

	Page								
W/O:			WC	RK ORDER CHANGE	ES				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date: _	
		esolution:							
NCR:			WORK ORDI	ER NON-CONFORMA	NCE (NCR	)	,		
NCR:	Description of NC		Corrective Action Section		Verific	cation	Approval	Approval	
DAIL	31LF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Sect	ion C	Chief Eng	QC Inspector
		·							

#### Work Order ID 72130

Page 2

Tuesday, July 19, 2011 12:42:05 PM

Item ID:

D3414-041

Accept



Setup Start

Stop



**Revision ID:** 

Item Name: Lug Assembly

**Required Date: 7/25/2011** 

**Start Date:** 

7/19/2011

**Start Qty: 10.00** Reg'd Qty: 10.00

**Cust Item ID:** 

**Customer:** 

Reference:

**Approvals:** 

Process Plan:

QC:

Date:

Tooling:

Date:

Run Start



Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ **Work Center ID** 

120

Quality Control

Operation Description

QC8- Inspect parts - second check

Memo

Set Up/ **Run Hours** 

0.00

Tool ID

Tool # Plan Code

Accept Qty

Reject Otv

Reject Insp. Number Stamp

130

Brake NC

Brake NC

Memo

1-Deburr 2-Form using DT8254 as per Dwg D3414 0.00

0.00

JB 11/08/26

140

Large Fab Large Fab

0.00

0.00

1- Weld using location Jig DT9625 as per Dwg D3414 A/R S.S. welding rod Batch:

B 118-31



		· <del></del>							*	
W/O:			WO	RK ORDER CHANG	ES			-		
DATE	STEP	PRO	OCEDURE CHAN	IGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
			•							
Part No		PAR #:	Fault Categ	ory:	NCF	R: Yes N	o DQA	۸:	_ Date: _	
			Disposition: Q			N/C Clos	sed:		Date:	
NCR:			WORK ORDE	R NON-CONFORM	ANCE	(NCR)				
DATE	STEP	Description of NC	Initial		ion B	Sign &	Verific		Approval	Approval
		Section A	Chief Eng	Action Description Chief Eng		Date	Section	on C	Chief Eng	QC Inspector
						•				
· ·										
					i					
1	1	1	1				1			1

#### Work Order ID 72130



Page 3

Tuesday, July 19, 2011 12:42:05 PM

Item	ID:
------	-----

D3414-041

Accept



Setup Start

Run



Stop



**Revision ID:** 

Item Name:

Lug Assembly

Start Date:

7/19/2011

**Start Qty: 10.00** Reg'd Qty: 10.00

**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Start

Stop



**Required Date: 7/25/2011** 

QC:

Date:

SPC (Y/N):

Tool ID

Tool # Plan

Accept

Reject

Reject

Insp.

Sequence ID/ **Work Center ID** 

150

Quality Control

Operation **Description** 

OC9- Inspect visual per OSI004- Fusion Welds

Memo

Memo

Set Up/ **Run Hours** 

0.00

0.00

Code

Date:

Qty

Number Qty

Stamp

Cpl 11.08.31

160



Quality Control

OC5- Inspect part completeness to step on W/O

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

170 Powdercoat

Powder Coating

Memo

START TIME: OVEN TEMPERATURE: FINISH TIME:

14x & m/ 11/04/01

m 117745

Dail Ac	ospace i	Liu											
W/O:		The state of the s	WO	RK ORDER CHANG	ES								
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
									:				
Part No	:	PAR #:	Fault Categ	ory:	_ NCR: Ye	es No [	QA:	Date: _					
	Res	solution:	Disposition	:	_ QA: N/C	Closed:		Date: _	<u>.</u>				
NCR:			WORK ORDER NON-CONFORMANCE (NCR)										
DATE	STEP	Description of NC			tion B	Vei	rification	Approval	Approval				
	0121	Section A	Initial Chief Eng	Action Description Chief Eng		n & S	ection C	Chief Eng	QC Inspector				
.4													
<del></del>													
							•						
	1		1 1	•		1		1	1				

#### Work Order ID 72130

Tuesday, July 19, 2011 12:42:05 PM



Page 4

Item ID:

D3414-041

Accept

Setup Start



**Revision ID:** 

**Start Date:** 

Item Name: Lug Assembly

Required Date: 7/25/2011

7/19/2011

Start Qty: 10.00

Req'd Qty: 10.00

**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

**Tool ID** 

Run

Start

Stop



QC:

Date: SPC (Y/N):

Date:

Tool # Plan

Code

Stop

Sequence ID/

Work Center ID

180

Quality Control

Operation Description

QC3- Inspect Part Finish

Memo

Set Up/ **Run Hours** 

0.00

0.00

Accept

Qty

Reject **Qty** 

Reject Number

Insp. Stamp

190

Packaging

Packaging

Identify as per dwg & Stock Location

0.00

0.00

200

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

Memo

0.00

W/O:			WO	RK ORDER CHANGE	S				
DATE	STEP	PRO	OCEDURE CHAN	IGE	Ву	Date	DQA:	Approval Chief Eng / Prod Mgr	Approval QC Inspector
						•			
Part No	•	PAR #:	Fault Categ	ory:	NCR: Yes	No DQ	A:	_ Date: _	<u> </u>
Resolution: Disposition:		:	QA: N/C Closed: Date:						
NCR:	NCR:		WORK ORDE	R NON-CONFORMAN	ICE (NCF	<b>(</b> )			
DATE	STEP	Description of NC	Initial	Corrective Action Section	B Sign 8				Approval
		Section A	Chief Eng	Action Description Chief Eng	Date	Secti	ion C	Chief Eng	QC Inspector
									-
		/							

#### **Picklist Print**

Tuesday, July 19, 2011 12:42:11 PM

Work Order ID: 72130

Parent Item:

D3414-041

Parent Item Name: Lug Assembly



**Start Date: 7/19/2011** 

Required Date: 7/25/2011

**Start Qty: 10.00** 

Required Qty: 10.00

Comments:

IPP A□05.09.13□New issue□KJ/JLM□

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S12GA	HAN BERN HAN KEN	Purchased	No			100	sf	144.8000	0.155	1.55 B	7-8-4		
				Location		Loc	<u>Oty</u>	Loc Code					
				MAT019			144.8				. /	13)	
					113062		118.3		_		. (	( )	
					113077		26.5			13077			
D3414-3		Manufactured	No			140	Each	36.0000	1	10			
Lug					72	327 /	( /¥			Q	11-8-	30_	
				<u>Location</u>		Loc	Oty	Loc Code					
				WA			36				_		
				,	70412		36						

034141

7/572 X1 Z 11-8-30

W/O:			W	ORK ORDER CHANG	ES				<u></u>	
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	7 .	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	•	PAR #:	Fault Cate	gory:	_ NCR: Y	es N	o <b>DQ</b> /	<b>\</b> :	_ Date: _	
	Res	olution:	Dispositio	n:	_ QA: N/0	Clos	sed:		Date: _	
NCR:			WORK ORD	ER NON-CONFORMA	ANCE (N	CR)				
DATE	STEP	Description of NC		Corrective Action Section			Verific	ation	Approval	Approval
- DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng		gn & ate	Section		Chief Eng	QC Inspector
										•
					·					
								******		
		<u> </u>								

DART AEROSPACE LTD	Work Order:	72130
Description: Lug Bracket	Part Number:	D3414-1
Inspection Dwg: D3414 Rev: C		Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

X First Article X Prototype

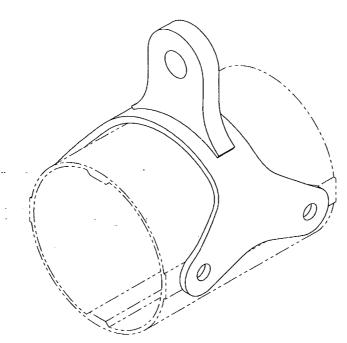
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.313	+0.006/-0.001	1314	≫		V 1802	
1.19	+/-0.030	1.184	>		V	
1.00	+/-0.030	1.013	>		V	
3.38	+/-0.030	3.375	7		V	
5.350	+/-0.010	5.249	7		V	
6.23	+/-0.030	6.231	کے		V	
2.500	+/-0.010	2.500	7		V	•••
0.37	+/-0.030	371	7		V	
0.100	+/-0.010	105	7		$\vee$	
				•		مالت مسا
						p
-						
						-

Measured by: R	Audited by:	8	Prototype Approval:	N/A
Date: 11-9-4	Date:	1102/04	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	08.02.28	New Issue P/O D3414-041	KJ/DD	
В	09.05.27	Dimensions updated per Dwg Rev B	KJ (A	
С	09.10.16	Dwg Rev updated to Rev C	KJ X	<b>M</b>

	Johann												
W/O:			W	ORK ORDER CHANGE	ES								
DATE	STEP	PRO	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector						
			***************************************										
Part No:		PAR #:	Fault Cate	egory:	NCR: Yes	No DQ	A:						
Resolution:			Disposition: QA: N/C Closed:					Date:					
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NC	₹)							
DATE	STEP	Description of NC Section A	Corrective Action Section			Verifi	cation	Approval	Approval				
DAIL	SILF		Initial Chief Eng	Action Description Chief Eng	Sign Date		ion C	Chief Eng	QC Inspector				
						:							
	}												

ITEM No.	QTY. -041	PART NUMBER	DESCRIPTION				
1	х	D3414-041	LUG ASSEMBLY				
2	1	D3414-1	LUG BRACKET				
3	1	D3414-3	LUG				



D3414-041 LUG ASSEMBLY

D

NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3414-041" USING FINE POINT PERMANENT INK MARKER

7) WEIGHT: 0.52 lbs

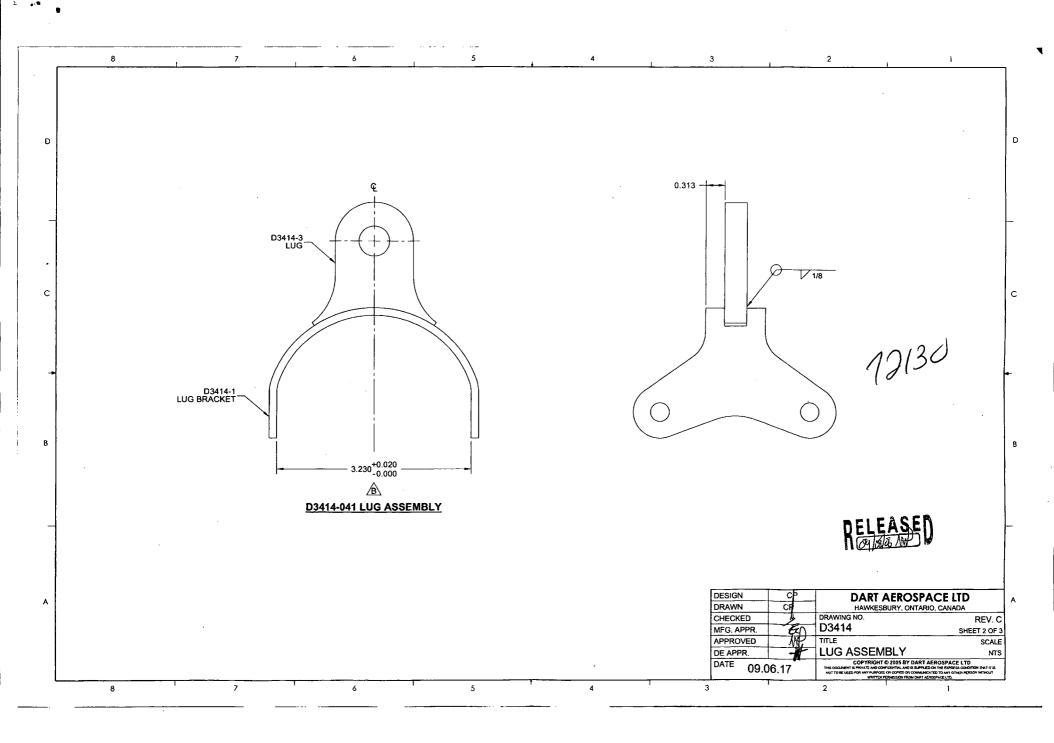
SHOP COPY RETURN TO ENGINEERING UNCONTROLLED (VIII) SUBJECT TO AMENDMEN SUBJECT TO AMERIUM IN WITHOUT NOTH WORK ORDER NO. 130

С	BREAK 0.010-0.	SHARP EDGE 030 (ZN A7-3)	СР	09.06.17				
В	DRAWING REDRAWN IN SOLIDWORKS WITH CURRENT STANDARDS AND TRANSFERED TO 28 SIZE BORDER. FLAT PATTERN FOR 1 INCREASED IN LENGTH TO PREVENT FOULING AT INST. (SEE PAR198). FLAT SPOTS REMOVED FROM. 1 (PART NOW "U" SHAPED) FOR EASE OF MANUFACTURE. 87-3 ADDED TOLERANCE TO 3.230 DIM. C2-3 1.12 DIM WAS 1.20.							
Α	NEW IS	SUE	СР	05.03.16				
REV.			DESCRIPTION	BY	DATE			
DESIG	N	ď₽	DART AEROSPA	DART AEROSPACE LTD				
DRAW	N	ΟP	HAWKESBURY, ONTARIO, CANADA					
CHECK	ED	,	DRAWING NO.		REV. C			
MFG. A	G. APPR.		D3414		SHEET 1 OF 3			
APPRO	PPROVED		TITLE		SCALE			
DE APPR.		- H	LUG ASSEMBLY		NTS			
DATE	09.0	16 17		COPYRIGHT © 2005 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONCIDENT THAT IT IS				

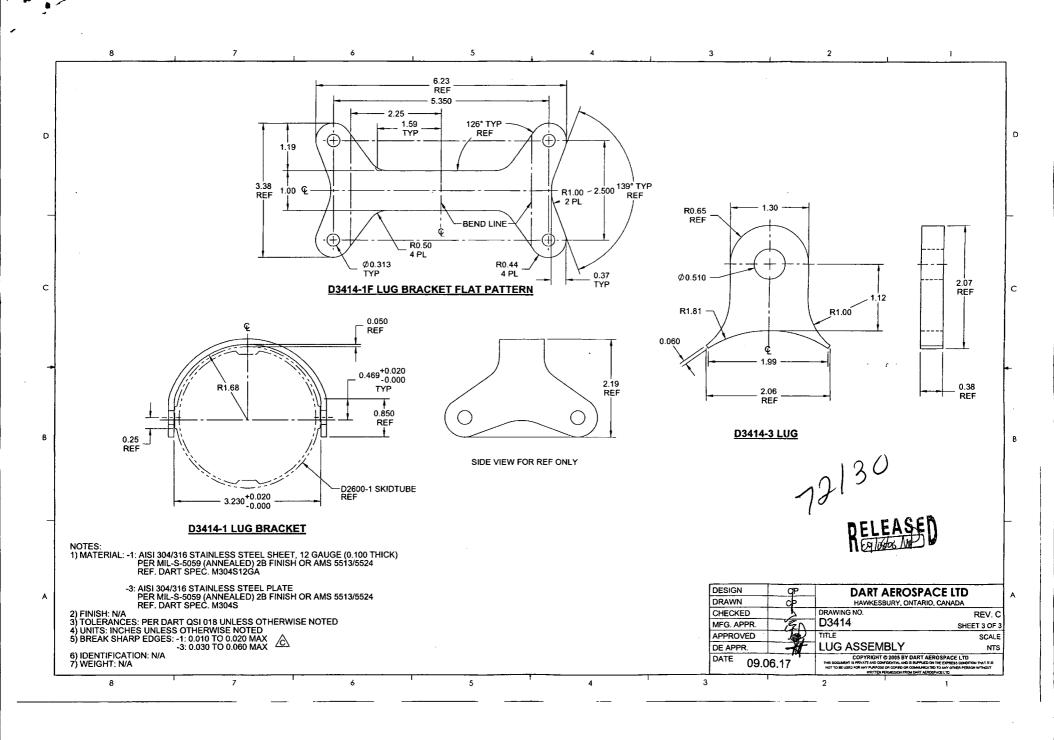
3

8

W/O:			WORK ORDER CHANGES									
DATE	STEP	PRO	PROCEDURE CHANGE					Approval Chief Eng / Prod Mgr	Approval QC Inspector			
			•						·			
							-					
<del></del>			· · · · · · · · · · · · · · · · · · ·									
Part No: PAR #:												
			Disposition: Q									
NCR:			WORK ORE	DER NON-CONFORM	ANCE (NC	R)						
DATE	STEP	Description of NC Section A			tion B Sigr		cation	Approval	Approval			
			Chief Eng	Action Description Chief Eng	Dat		tion C	Chief Eng	QC Inspector			
							•		·			
									· .			
								:				
								i				



Duit Ac	ospace	LIG							
W/O:			W	ORK ORDER CHANG	GES				
DATE	STEP	PRO	PROCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								!	
Davi Ma	_								
		PAR #: esolution:							
NCR:				ER NON-CONFORM			177		
DATE	STEP	Description of NC	Corrective Action Initial Action Descript		ction B		cation	Approval	Approval
		Section A	Chief Eng	Chief Eng		nte Sec	tion C	Chief Eng	QC Inspector
		<u> </u>							



Dart Ae	ospace	<b>Ltd</b>		•						p.		
W/O:		WORK ORDER CHANGES										
DATE	STEP	PROCEDURE CHANGE					Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
		*	*						·			
Part No:		PAR #:	Fault Cat	egory:	NC	NCR: Yes No DQA: Date:						
Resolution:			Disposition:		QA	QA: N/C Closed: Date:						
NCR:		V	VORK OR	DER NON-CONFORI	MANCE	(NCR	)					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action S Action Descriptio Chief Eng	Section B	Sign & Verification Section			Approval Chief Eng	Approval QC Inspector		
			Siller Eng	Onlor Eng		Julio						
								·				
						,						
					1	:						
•		:										